

# SPECIALTY PRODUCTS

## Ejectors

Syphons, Eductors, Exhausters & Injectors

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Model	<b>W-EJECT, W-ELL, W-LM</b>
Sizes	<b>1/2" - 2"</b>
Connections	<b>NPT</b>
Body Material	<b>Bronze (1/2" - 1 1/2") Cast Iron (2")</b>
PMO Max. Operating Pressure	<b>100 PSIG</b>
TMO Max. Operating Temperature	<b>130°F</b>
PMA Max. Allowable Pressure	<b>250 PSIG up to 450°F</b>
TMA Max. Allowable Temperature	<b>450°F @ 250 PSIG</b>

Note: Minimum Operating Pressure for W-ELL & W-LM is 20 PSIG.



**W-ELL & W-LM**



**W-EJECT**

### TYPICAL APPLICATIONS

Watson McDaniel **Ejectors** perform a variety of functions depending on the application and motive fluid (steam or water) used. See performance charts on the following pages. Applications include: exhausting, agitating, aerating, circulating, pumping and mixing.

### HOW IT WORKS

Using water, steam or air pressure as the motive force, ejectors operate on the principle that a high velocity flow through a nozzle will create a pressure drop in the area around the nozzle discharge. The resulting vacuum will induce flow into the secondary inlet of the ejector.

### FEATURES

- No moving parts
- Can be used with water or steam pressure
- Submersible
- Available in cast iron or bronze

### SAMPLE SPECIFICATION

Ejectors shall be constructed from bronze or cast iron. Units shall be capable of using steam, water or air as a motive force.

### INSTALLATION

See installation examples on following page.

### MATERIALS

Body (1/2" - 1 1/2")	Bronze
Body (2")	Cast Iron
Nozzles (all sizes)	Bronze

Note: W-ELL & W-LM for liquid motive service only.

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## W-EJECT

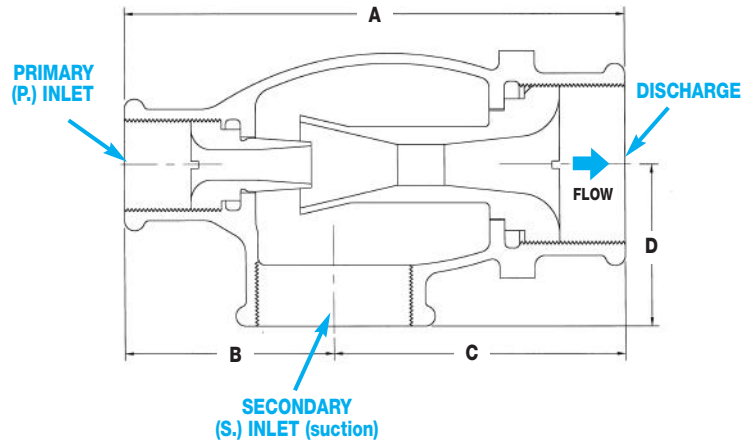
### DIMENSIONS – inches

Size	Connection Sizes *			Dimensions			
	S. Inlet	Discharge	P. Inlet	A	B	C	D
<b>Bronze Body &amp; Nozzles</b>							
1/2"	1/2	1/2	1/4	3 1/4	17/16	1 13/16	1 1/8
3/4"	3/4	3/4	3/8	4	1 1/2	2 1/2	1 3/8
1"	1	1	1/2	5 1/8	2 1/4	2 7/8	1 5/8
1 1/4"	1 1/4	1 1/4	3/4	5 7/8	2 7/16	3 7/16	1 13/16
1 1/2"	1 1/2	1 1/2	3/4	6 1/4	2 11/16	3 9/16	1 15/16

### Cast Iron Body with Bronze Nozzles

2"	2	2	1	7 1/4	3 3/8	4 1/8	2 3/8
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\* Connections are female NPT.



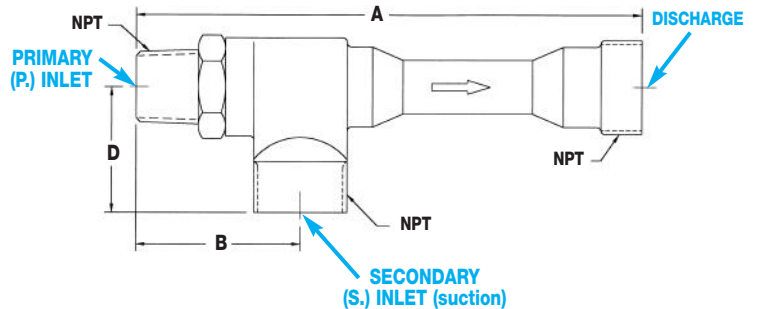
## W-ELL / W-LM

### Bronze Body & Nozzles

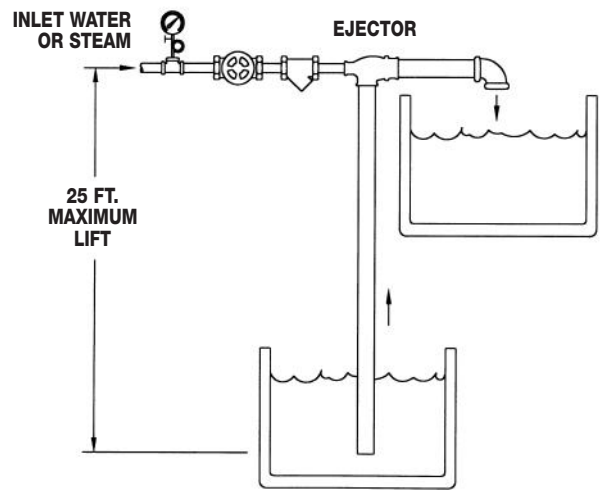
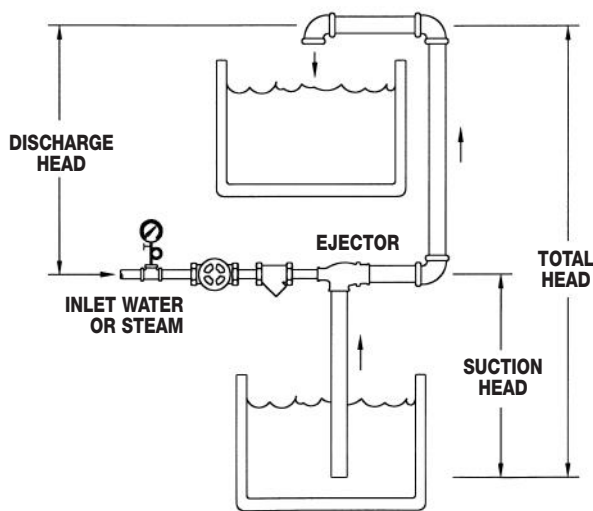
### DIMENSIONS – inches

Size	Connection Sizes **			Dimensions		
	S. Inlet	Discharge	P. Inlet	A	B	D
3/4"	3/4	3/4	1/2	5 13/16	2	1 3/8
1"	1	1	3/4	7 1/8	2 5/16	1 3/4
1 1/4"	1 1/4	1 1/4	1	9	2 7/16	2 1/8

\*\* Connections are male NPT.



## Ejectors shown Pumping Liquid



It is always desirable to keep the Ejector as close to the actual liquid being pumped as possible. The maximum height the liquid can be pumped depends on the pressure of the "motive" liquid or steam available. Please refer to the capacity graphs for maximum flow rates and maximum achievable heads.

The maximum height that water or any liquid with a specific gravity of 1 can be lifted is 25 feet. Increases in the temperature of the liquid being lifted will cause this maximum height to decrease. Pumping liquids in excess of 130°F is not recommended. Please consult factory with any specific application.